

Amendments to the Claims:

This listing of claims will replace all prior versions, and listing, of claims in the application:

Listing of Claims:

Claim 1 (Currently Amended) A microwave circuit, comprising:

first and second microwave modules, each of which comprises a conductor sandwiched between upper and lower thickfilm dielectrics, and a ground shield surrounding the upper and lower thickfilm dielectrics in a direction transverse to the conductor; wherein, at a first end of each of the conductors, the conductor extends from beneath it's a respective upper thickfilm dielectric to terminate at a cut edge of its a corresponding microwave module; the microwave modules being mounted with said cut edges facing one another;

a bridge conductor, electrically coupling the first ends of the conductors; and
a ground shield cap, oriented over the bridge conductor and electrically coupled to the ground shield surrounding the upper and lower thickfilm dielectrics of each of the microwave modules.

Claim 2 (Original) The microwave circuit of claim 1, wherein the bridge conductor comprises a ribbon bond.

Claim 3 (Original) The microwave circuit of claim 1, wherein the bridge conductor comprises a mesh bond.

Claim 4 (Original) The microwave circuit of claim 1, wherein the bridge conductor comprises a plurality of wire bonds.

Claim 5 (Previously Presented) The microwave circuit of claim 1, wherein the ground shield cap is electrically coupled to the ground shield of each of the microwave modules via solder.

Claim 6 (Previously Presented) The microwave circuit of claim 1, wherein the ground shield cap is electrically coupled to the ground shield of each of the microwave modules via conductive epoxy.

Claim 7 (Previously Presented) The microwave circuit of claim 1, wherein each of the microwave modules comprises a ceramic substrate.

Claim 8 (Previously Presented) The microwave circuit of claim 1, wherein the upper and lower thickfilm dielectrics of each of the microwave modules comprise a KQ dielectric.

Claim 9 (Currently Amended) A microwave circuit, comprising:

first and second microwave modules, each ~~comprising~~ comprising: i) a substrate, ii) a first ground shield formed on the substrate, iii) a first dielectric formed on the first ground shield, iv) a conductor formed on the first dielectric, v) a second dielectric formed on the conductor, and vi) a second ground shield formed on the second dielectric; wherein, for each microwave module, at least the second dielectric and second ground shield are recessed from an end of the conductor terminating at or near a cut edge of the corresponding microwave module; wherein, for each microwave module, the first ground shield and the second ground shield contact one another to surround the first dielectric and the second dielectric in a direction transverse to the conductor; the microwave modules being mounted with said cut edges facing one another;

a bridge conductor, electrically coupling said ends of the conductors of the microwave modules; and

a ground shield cap, oriented over the bridge conductor and electrically coupled to the second ground shield of each of the microwave modules.

Claim 10 (Currently Amended) A method for coupling first and second microwave modules, wherein each microwave module ~~comprises~~ comprises: i) a substrate, ii) a first ground shield formed on the substrate, iii) a first dielectric formed on the first ground shield, iv) a conductor formed on the first dielectric, v) a second dielectric formed on the conductor, and vi) a second ground shield formed on the second

dielectric; and wherein, for each microwave module, at least the second dielectric and second ground shield are recessed from a first end of the conductor; wherein, for each microwave module, the first ground shield and the second ground shield contact one another to surround the first dielectric and the second dielectric in a direction transverse to the conductor; the method comprising:

for each of the microwave modules, cutting the microwave module in proximity to the first end of the conductor, thereby defining a first edge of the corresponding microwave module;

mounting the microwave modules adjacent one another, with their first edges facing each other;

electrically coupling said first ends of the conductors of the microwave modules; and

placing a ground shield cap over the conductor coupling, and electrically coupling the ground shield cap to the second ground shield of each of the microwave modules.

Claim 11 (Previously Presented) The method of claim 10 wherein electrically coupling said first ends of the conductors of the microwave modules comprises placement of a ribbon bond.

Claim 12 (Previously Presented) The method of claim 10, wherein electrically coupling said first ends of the conductors of the microwave modules comprises placement of a mesh bond.

Claim 13 (Previously Presented) The method of claim 10, wherein electrically coupling said first ends of the conductors of the microwave modules comprises placement of a plurality of wire bonds.

Claim 14 (Previously Presented) The method of claim 10, wherein electrically coupling the ground shield cap to the second ground shield of each of the microwave modules comprises placement of solder.

Claim 15 (Previously Presented) The method of claim 10, wherein electrically coupling the ground shield cap to the second ground shield of each of the microwave modules comprises placement of conductive epoxy.

Claim 16 (Currently Amended) A method, comprising:

selecting first and second microwave modules, each ~~comprising~~ comprising: i) a substrate, ii) a first ground shield formed on the substrate, iii) a first dielectric formed on the first ground shield, iv) a conductor formed on the first dielectric, v) a second dielectric formed on the conductor, and vi) a second ground shield formed on the second dielectric; wherein, for each microwave module, at least the second dielectric and second ground shield are recessed from an end of the conductor terminating at or near a cut edge of the microwave module; wherein, for each microwave module, the first ground shield and the second ground shield contact one another to surround the first dielectric and the second dielectric in a direction transverse to the conductor;

mounting the microwave modules adjacent one another, with said cut edge of the first microwave module facing said cut edge of the second microwave module;

electrically coupling said ends of the conductors of the microwave modules;
and

placing a ground shield cap over the conductor coupling, and electrically coupling the ground shield cap to the second ground shield of each of the microwave modules.

Claim 17 (Previously Presented) The method of claim 16, wherein electrically coupling the ends of the conductors of the microwave modules comprises placement of a ribbon bond.

Claim 18 (Previously Presented) The method of claim 16, wherein electrically coupling the ends of the conductors of the microwave modules comprises placement of a mesh bond.

Claim 19 (Previously Presented) The method of claim 16, wherein electrically coupling the ends of the conductors of the microwave modules comprises placement of a plurality of wire bonds.

Claim 20 (Previously Presented) The method of claim 16, wherein electrically coupling the ground shield cap to the second ground shield of each of the microwave modules comprises placement of solder.

Claim 21 (Previously Presented) The method of claim 16, wherein electrically coupling the ground shield cap to the second ground shield of each of the microwave modules comprises placement of conductive epoxy.

Claim 22 (Previously Presented) The microwave circuit of claim 1, wherein the ground shield cap has a top portion and at least one side portion extending away from the top portion, and wherein the ground shield cap forms a void between the top portion thereof, the at least one side portion thereof and the first and second microwave modules when the ground shield cap is electrically coupled to the ground shield surrounding the upper and lower thickfilm dielectrics of each of the microwave modules.

Claim 23 (Previously Presented) The microwave circuit of claim 9, wherein the ground shield cap has a top portion and at least one side portion extending away from the top portion, and wherein the ground shield cap forms a void between the top portion thereof, the at least one side portion thereof and the first and second microwave modules when the ground shield cap is electrically coupled to the second ground shield of each of the microwave modules.

Claim 24 (Previously Presented) The method of claim 10, wherein placing the ground shield cap over the conductor coupling, and electrically coupling the ground shield cap to the second ground shield of each of the microwave modules further comprises forming a void between a top portion of the ground shield cap, at least one side portion of the ground shield cap and the first and second modules.

Claim 25 (Previously Presented) The method of claim 16, wherein placing the ground shield cap over the conductor coupling, and electrically coupling the ground shield cap to the second ground shield of each of the microwave modules further comprises forming a void between a top portion of the ground shield cap, at least one side portion of the ground shield cap and the first and second modules.